



THE HANFORD SITE

Single-Shell Tank Retrieval Status Update and Path Forward

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Safety Message: Use of Operational Experience

- Operating Experience
- Organization
- Feedback
- Lessons learned

- Single-shell tank retrievals status update
- Related Hanford Advisory Board Work Plan Topic:
Tank Closure Progress

Objective of the briefing: Provide a status update on single-shell tank waste retrievals.

What is being briefed?

- Update on retrieval status of Tanks AX-102 and AX-104
- Path-forward for Tanks AX-102 and AX-104
- Lessons for future A/AX tank farm waste retrievals
- Status of construction for next retrievals

What do we want the HAB to do with this information?

- Informational briefing to remain current on tank waste retrieval operations.

Retrievals Performed to Date

(AX Farm tanks are all 1 million-gallon capacity, flat bottom and contain 23 air circulators)

Tank AX-102

- 30,000 gallons of saltcake and sludge
- Extended-reach sluicing and high-pressure water technologies
- Limits of two cleanup technologies reached Jan. 6, 2020

Tank AX-104

- 5,000 gallons of sludge
- Extended-reach sluicing and high-pressure water technologies
- Limits of two cleanup technologies reached Feb. 1, 2021



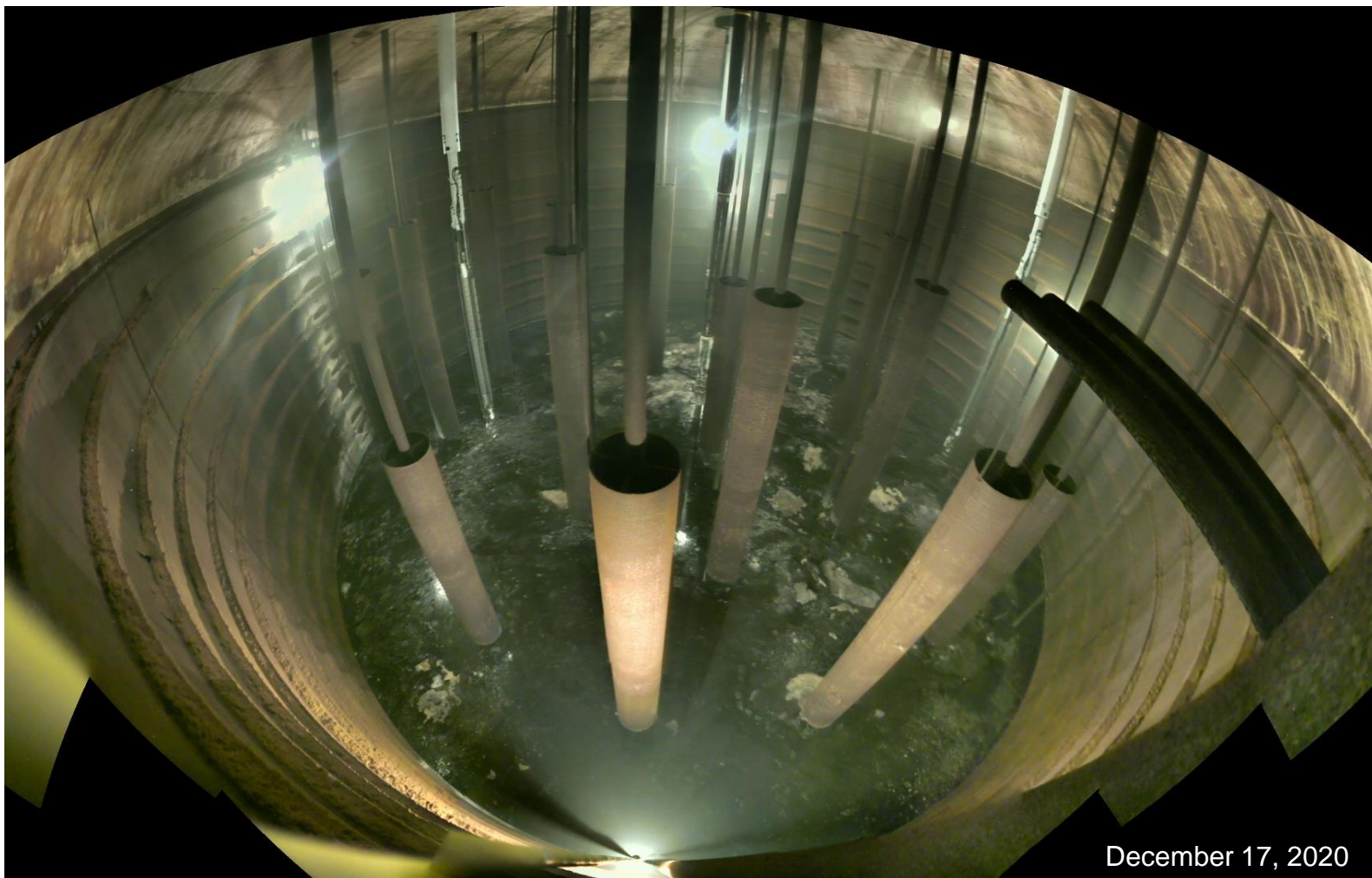
A/AX Farms aerial
May 12, 2020



Tank AX-102 pre-retrieval tank view

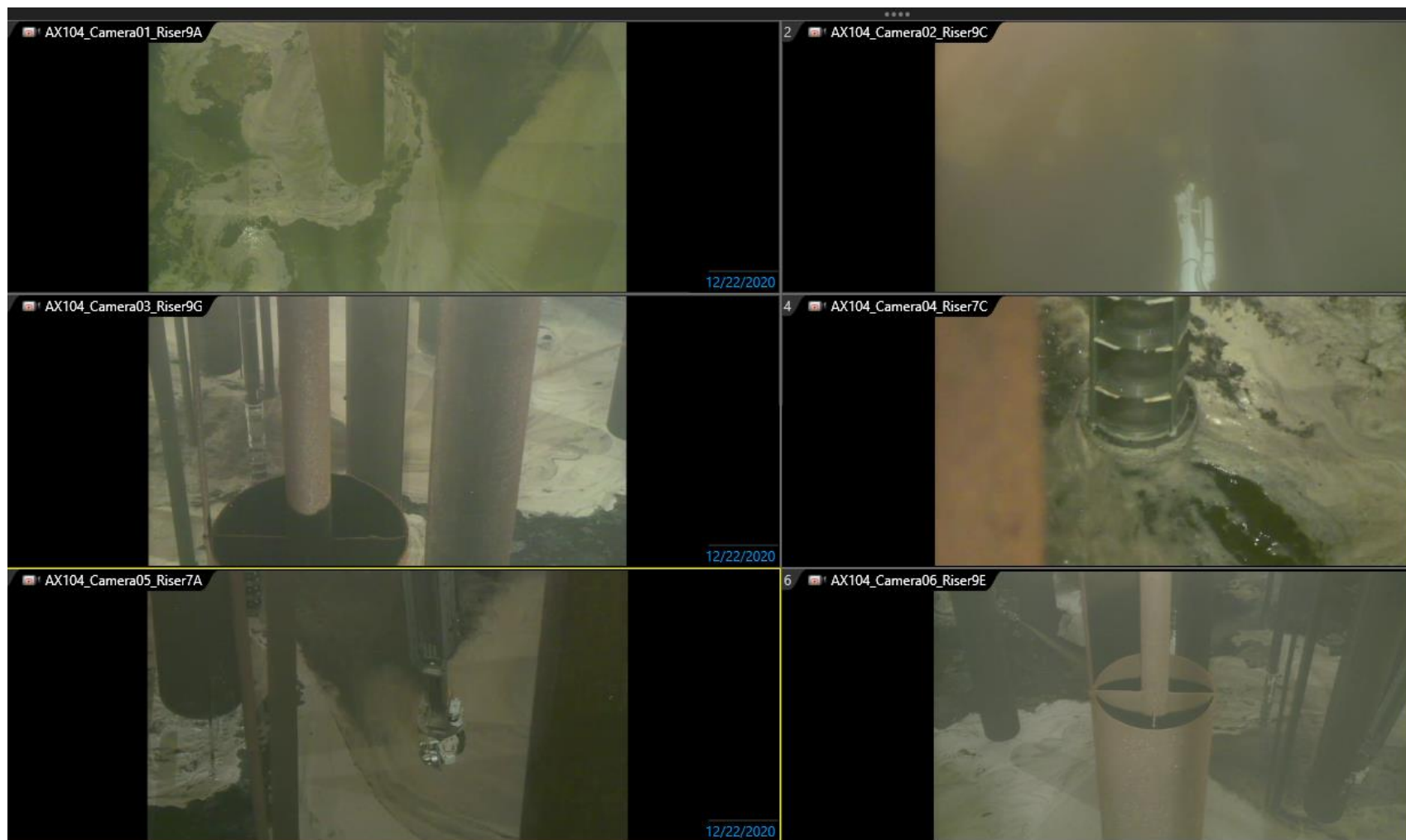


Tank AX-102 post-retrieval tank view

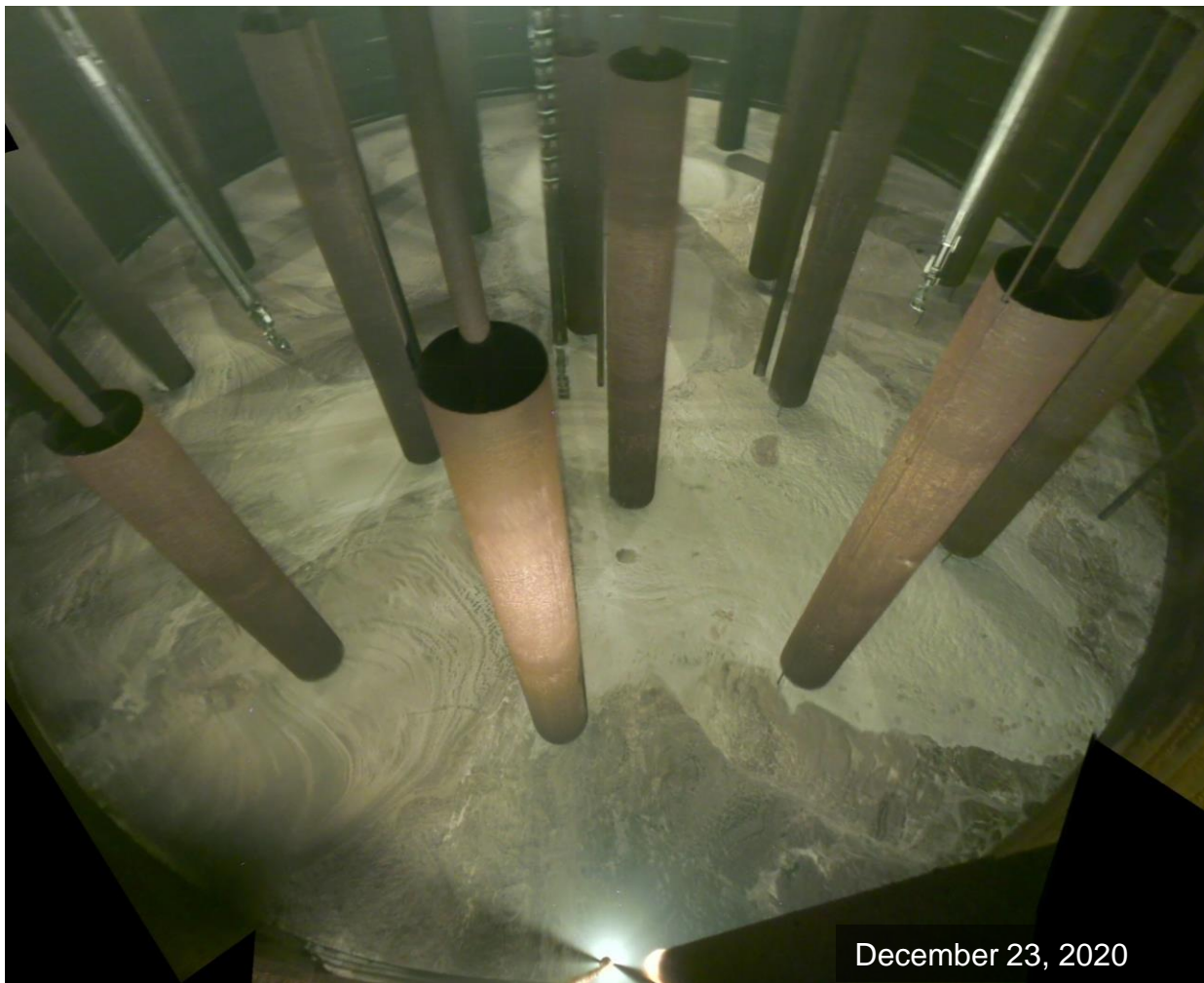


December 17, 2020

Tank AX-104 pre-retrieval tank view



Tank AX-104 in-tank six-camera view of tank retrieval, which began Dec. 22, 2020



Tank AX-104, recirculation of caustic solution

Lessons for Future A/AX Farms Tank Waste Retrievals



Tank AX-102 tank wall, post-retrieval

AX-Farm

Tank AX-103

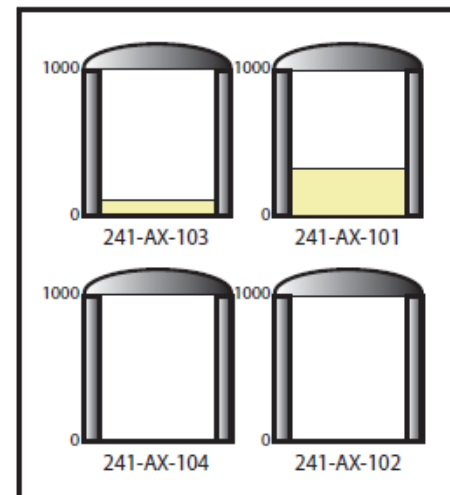
- 104,000 gallons of waste, mostly saltcake
- Construction finishing, with a July 2021 retrieval start date
- Sluicing and high-pressure water technologies

Tank AX-101

- 323,000 gallons of waste, mostly saltcake
- Construction underway, with fall 2022 retrieval start date
- Sluicing and high-pressure water technologies

AX-Tank Farm- Constructed 1963-1965
4 @ 1,000 Kgal Tank Capacity, Single-Shell

Tank	Kgal		
	Sludge	Saltcake	Supernatant
241-AX-101	2	321	0
241-AX-102	6	7	0
241-AX-103	8	96	0
241-AX-104	3	0	5



AX Farm tank waste contents (as of Jan. 31, 2021)

A Farm

- Tank ventilation system installed and operating
- Tank A-101 internal equipment removal underway
- Tank Farm utilities upgrade underway
- First A Farm tank retrieval (Tank A-101) begins 2024



A Farm ventilation system



Tank A-101 saltwell pump removal

- The Tank Operations Contract contractor is making excellent progress in safely and efficiently retrieving A/AX tanks, making Hanford safer for the workforce, the public and environment
- DOE and the contractor are consistently examining operating experiences to identify and apply lessons learned for future tank waste retrievals